

REMARKS

This is in response to the Official Action currently outstanding with respect to the above-identified application, which Official Action the Examiner has designated as being FINAL.

Claims 1, 2 and 7-9 were present in this application as of the time of the issuance of the currently outstanding FINAL Official Action. Claims 1, 2 and 7-9 currently stand rejected by the Examiner. By the foregoing Amendment, Applicants propose that Claims 1 and 2 be amended. Applicants do not propose the cancellation, addition or withdrawal of any claims. Accordingly, in the event that the Examiner grants the entry of the foregoing Amendment, Claims 1, 2 and 7-9 as hereinabove amended will constitute the claims under active prosecution in this application.

The foregoing Amendment sets forth the wording of all of the claims currently pending in this application as it will stand in the event that the Examiner grants the entry of this Amendment as required by the Rules.

More specifically, it is noted that in the currently outstanding Official Action, the Examiner has:

1. Re-acknowledged Applicants' claim for foreign priority under 35 USC §119(a)-(d), and reconfirmed that the required certified copies of the priority document have been received by the United States Patent and Trademark Office.
2. Re-acknowledge the acceptability of the drawings as filed with this application.
3. Finally rejected claims 1, 2, 7 and 8 under 35 USC §103(a) as being unpatentable over Beaudet (US Patent 5,511,150) in view of Lobiondo (US Patent 5,287,194); and
4. Finally rejected claim 9 under 35 USC §103(a) as being unpatentable over Beaudet in view of Liondo further in view of Brown (US Patent No. 5,327,487).

Further comment in these Remarks regarding items 1-2 above is not considered to be necessary in these Remarks.

Applicant appreciates the Examiner's thorough examination of the subject application and respectfully requests reconsideration of the subject application based on the foregoing amendments and the following remarks.

In the Response to Arguments section of the currently outstanding Final Official Action, the Examiner correctly points out that amended Claims 1 and 2 failed to carry forward the "instead of" limitation of Claims 3 and 4. Further, the Examiner suggests that that from the newly amended claims and the argument presented by the Applicant on the bottom of page 5 and the top of page 6 of the last filed amendment in this case it appears that the finish time of the interrupt job is displayed before the interrupt job is in the process of being printed. Applicants respectfully submit that while the first of these observations is correct, the latter thereof is not correct.

Specifically, Applicants' use of the term "and/or" in amended Claims 1 and 2 was intended to convey the fact that the same "display means" is contemplated to be capable of displaying either or both of the "permissible interrupt time" and the "finish time of the interrupt job". It was not intended to be an limiting indication of the particular time periods during which those times are displayed. Accordingly, without change to the intended scope of Claims 1 and 2 as previously worded, Applicants by the foregoing Amendment now have clarified the facts that (1) the time of the interrupt job is calculated relative to an ongoing coping and print job; (2) the permissible interrupt time is displayed during the ongoing copying and print job, and (3) the finish time of the interrupt job is displayed during the interrupt job. Accordingly, Applicants respectfully submit that any possible ambiguity or lack of definiteness in the claims of this application that might allow for the misinterpretation thereof has been removed by the present Amendment. Further, Applicants respectfully submit that the foregoing Amendment should not be deemed to present any new issues that would require further consideration and/or search, but rather to simply clarify the subject matter being claimed in a manner that places this application in condition for allowance as required by 37 CFR 1.116.

Further, Applicants respectfully submit that the Examiner has misinterpreted the Beaudet reference in the currently outstanding Final Official Action. Thus, the Examiner asserts that “During printing of the interrupt job, the calculating device of Beaudet, instead of calculating the permissible interrupt time (there is no more permissible interrupt time for the interrupt job because the interrupt job is being printed), *the calculating device calculates the finish time of the interrupt job continuously as shown in fig. 4F1 and 4F2 (the interrupt job becomes the print job being printed currently).*” Emphasis added

However, reference to the explanation of the operation of the Beaudet device in his specification (see particularly Column 8, line 23 to Column 9, line 40) clearly indicates that as stated in the next previous Amendment in this application: “...Figures 4F1 and 4F2 of the Beaudet reference merely display the facts that a second (permissibly an “interrupt”) job is currently scanning for storage in JIB 48 (Fig. 4F1), or is completely scanned and waiting in storage (Fig. 4F2), pending the end of the then ongoing job whose time remaining and other status information in fact are displayed, i.e., set 124 of 200 of printing job 1234, **time remaining 5 mins 37 secs** (emphasis added). There simply is no mention in the Beaudet reference of calculating or displaying the after printing finish time of a requested interrupt job. Even in the case of an immediate current job interruption, the Beaudet display is limited to an indication of a time until interrupt will occur (see Fig. 4I) in order to allow the already started portions of the current print job to be completed. Thereafter, the display of Fig. 4J is displayed for a set period of time within which an interrupt job must be started or the system reverts back to the originally interrupted job.”

Applicants respectfully submit that the foregoing interpretation is further supported by reference to the various flow diagrams present in the Beaudet reference. Specifically, Beaudet makes it clear that the “X” subroutine (Fig. 3F) governs the delay period for an interrupt job to commence, and that if an interrupt job commences the flow follows that shown for the input “D” in Fig. 3D that clearly indicates that Fig. 4J represents the screen of the Beaudet display during an interrupt job. Accordingly, Applicants respectfully submit that Beaudet clearly does not teach, disclose or suggest that the calculating device disclosed therein functions during an interrupt job as if the interrupt job was the interrupted job (i.e., by calculating and displaying the time until its completion.

Accordingly, even though the Lobiondo reference indicates that a time until the completion of a job in a printing queue may be calculated in some cases, Applicants respectfully submit that the cases to which the Lobiondo reference applies do not contemplate that a job in a printing queue interrupting an ongoing job. Instead, Lobiondo as interpreted by Applicants refers to a simple calculation of the finish time of any job in a printing queue based upon the position of the job in the queue and the estimated times required for the completion of the jobs preceding the job of interest in the queue. This is not the time to completion of an interrupting job as herein claimed, and Applicants respectfully submit that nothing in either the Beaudet or the Lobiondo reference suggests the combination postulated by the Examiner, particularly in view of the foregoing clarifying Amendment.

Therefore, Applicants respectfully submit that the following points should be particularly recognized.

1. Beaudet discloses that a print job may be input from the outside in parallel with (without discontinuing) the continued processing of another ongoing print job, that the time to completion of the currently ongoing print job may be displayed, and that the job entered in parallel with the currently ongoing job may under certain circumstances be made to interrupt the currently ongoing job.
2. Lobiondo discloses a printing system utilizing a plurality of printers disposed in a network that may separately process in whole or in part each print job. In Lobiondo, the time until the processing of a particular job in a printing queue is displayed to the user, and the user then has the opportunity to spread the print job across numerous of the printers in the network or to make other arrangements if the displayed time until print job completion is deemed to be too long.

3. In the present invention, an interrupting print job can be made to temporarily interrupt an ongoing print job at specific times during the ongoing job, and the time until such a potential interrupting time is displayed such that an interrupting user is provided with a clear indication of the wait time that will be required prior to the initiation of his requested interruption. Thus, the present invention may be thought of as an effective technique related to user interfaces concerning the processing of interrupting jobs. Accordingly, when viewed from a user perspective, the following features of the invention become clear.

If a request for interruption is desired to be made during the processing of a previous job, the waiting time until the initiation of the interrupting job is displayed to the potential user. Thus, to an "interrupter", the waiting time until his job can be started is displayed to him.

Subsequently, once the interrupting job is processed into the device and the interrupting of the ongoing job is commenced, the "interrupter" is provided with a display of how long it will take for the completion of the interrupting job, and by the same means the "interruptee" is provided with a display of how long the continued processing of his job will be delayed.

Beaudet, however, while disclosing a system wherein there are a set times established for the reception and acceptance of interrupting requests during its operation, never discloses that a preceding job being currently processed can be temporarily discontinued after the receipt of an interruption request or that in the case of an allowed interruption the time until the completion of that interruption is displayed.

In view of the foregoing Amendment and Remarks, therefore, Applicants respectfully submit that any misunderstanding of the scope and meaning of the claims of this application has been removed by the foregoing Amendment and that in view of that Amendment and the foregoing Remarks it will be clear to the Examiner that upon granting the entry of the foregoing Amendment the present application will be in condition for allowance as required by 37 CFR 1.116 without any need for further extensive consideration and/or search.

Accordingly, entry of the foregoing Amendment, reconsideration and allowance in response to this communication are respectfully requested.

Applicants believe that additional fees are not required in connection with the consideration of this response to the currently outstanding Official Action. However, if for any reason a fee is required, a fee paid is inadequate or credit is owed for any excess fee paid, you are hereby authorized and requested to charge and/or credit Deposit Account No. **04-1105**, as necessary, for the correct payment of all fees which may be due in connection with the filing and consideration of this communication.

Respectfully submitted,

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David A. Tucker
SIGNATURE OF PRACTITIONER

Reg. No. 27,840

David A. Tucker
(type or print name of practitioner)
Attorney for Applicant

Tel. No. (617) 517-5508

Edwards Angell Palmer & Dodge LLP
P. O. Box 55874
P.O. Address

Customer No. 21874

Boston, MA 02205